

## ILLUSTRATIONS OF THE IPA

# Seri

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Seri (self-designation: *cmiique iitom* [kʷĩk'i:tom]) is a language isolate spoken in the state of Sonora, Mexico, by about 800 people. In this description we present a variety that is typical of the majority of speakers. The recordings are of one of the authors (XMH), a male speaker born in 1964. The technical description is based on Moser & Moser (1965), although the analysis has been updated to agree with the data and arguments presented in Marlett (1981, 1988) and Moser (1996).

## Consonants

	Bilabial	Dental	Alveolar	Post-alveolar	Palatal	Velar	Uvular	Glottal
Stop	p	t				k k <sup>w</sup>		ʔ
Nasal	m	n						
Fricative	ɸ		s ɬ	ʃ		x x <sup>w</sup>	χ χ <sup>w</sup>	
Tap			r*					
Central approximant					j			
Lateral approximant			l**					

\* In a few loanwords.

\*\* In very few native words and some loanwords.

The labial fricative, described as bilabial in Moser & Moser (1965: 53), is labiodental in the speech of one of the authors (XMH) and bilabial in the speech of the other (GHA). The alveolar central fricative is often quite fronted and could be represented as [ʃ], but this may be due to tongue grooving more than to place. According to Moser & Moser (1965: 54), the postalveolar fricative is alveopalatal retroflex in most contexts. It is not retroflex in the speech of all present-day speakers, including that of the authors, but an alveolar/postalveolar place and tongue grooving are implicated in most pronunciations.

The palatal approximant is sometimes pronounced as a voiced postalveolar affricate, although this is not the typical pronunciation; it may be a rather recent effect of bilingualism since Spanish speakers in the region do the same.

Consonants are presented in three positions in the following chart: word-initial, syllable-initial word-medial, and word-final. The rounded consonants are a fairly recent development resulting from the loss of an /o/; they therefore have a somewhat restricted distribution.

p	'pat ʔapax nop	'cattail' 'octopus' 'bobcat'	t	'tafo ʔatip kset	'one' 'bat eagle ray' 'frigatebird'	k	'kosi ʔakat ʔik	'thorn' 'shark' 'bird'
						k <sup>w</sup>	k <sup>w</sup> iʔim 'sak <sup>w</sup>	'sanderling' 'toadfish'
						ʔ	ʔaso ʔaʔo ʔaʔ	'fishing net' 'road' 'sun'
m	'mo:ɯni ʔi:mɛ ʔam	'green sea turtle' 'sardine' 'squash'	n	'no:ɯsi ʔanax pɛm	'mourning dove' 'raven' 'carrying pole'			
ɸ	ɸɛɪ ʔapɸɛ i:ɸ	'mallard' 'harpoon point barb' 'his/her nose'	s	'simɪ kosi  ʔɛ:ɯ ʔɛ:ɛ 'o:ɪ l ʔɛχox ɪna:ɪɪ χa'la:	'barrel cactus' 'thorn'  'gray fox' 'fog' 'organ pipe cactus' 'a mollusk' 'cactus wren'	ʃ	'ʃaʃan koʃi  χpa:ʃ xo'ɛ:ne 'moxet ʔa:x x <sup>w</sup> ta'x <sup>w</sup> amʃ 'ka:x <sup>w</sup> χ χɛ:ɯ ʔaχox i:ʃaχ χ <sup>w</sup> i'tiχ <sup>w</sup> j* jɛ:m i:jas	'grackle' 'bitter condalia'  'basalt' 'dirt in the air' 'bighorn sheep' 'cave' 'did it squirt out?' 'seep willow' 'gray fox' 'shore' 'moon' 's/he sang!' 'did s/he jump over it?' 'his/her/its face' 'his/her liver'

\*/j/ occurs in syllable-final position only in two loanwords: /'ka:j/ 'horse' and /ʔapɑ:j/ 'Oodham (Papago)'. It is almost indistinguishable here from postvocalic /i/, as in [ka:i] 'the one who makes it'. Most telling is the fact that an epenthetic vowel separates the glide from a following glottal stop.

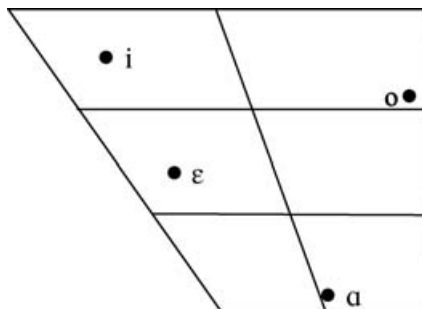
## Vowels

The four vowels occur short and long; they contrast in quality in both stressed and unstressed positions. During the past few decades, it has been observed that the vowel /ɛ/ is being replaced by /i/ in post-tonic unstressed syllables (as in the word for 'Seri person', /kmi:kɛ/, /kmi:ki/). Long vowels do not occur contrastively in unstressed syllables.

In utterance-initial position, a vowel may have a slightly breathy onset in contrast to a vowel preceded by a phonemic glottal stop.

While morphophonologically the vowels seem to pattern clearly as front vs. back and high vs. low, the front 'low' vowel is phonetically closer to the open-mid front unrounded vowel [ɛ] than to the near-open front unrounded [æ]. Occasionally the back rounded vowel /o/ is heard pronounced more close, as [u]. (Seri speakers often interchange [u] and [o] when speaking Spanish.) The vowel /i/ tends to be a bit more open when it is short and in a closed syllable, and a bit centralized when it precedes a uvular fricative.

Some syllables display extra-long vowels. Although some instances of long and extra-long vowels result from the juxtaposition of two morphemes with identical vowels, the majority of the examples with long vowels are monomorphemic, and the morphophonological evidence convinces us that they are not sequences of identical vowels but rather are long vowels.



i	'kis	'that which is raw'	i:	'ki:s	's/he who misses'
	'tis	'cat-claw'		'ʃi:x	'blue palo verde'(tree)
o	'kos	'species of plant'	o:	'ko:s	's/he who sings'
	'nop	'bobcat'		'χo:p	'elephant tree'
ε	'kεmε	'that which is used up'	ε:	'kε:mεx	'that which moves slowly'
	'ʃεp	'golden eagle'		'ʔε:p	'mesquite sap'
α	'ʔαp	'mule deer'	α:	'ʔα:p	'teparty bean'
	'χat	'hail'		'ʔα:t	'limberbush'

### Accent

The accent usually falls on the first syllable of the root. We consider this as the default position and other positions as lexical exceptions. In compounds and in phrases, the primary stress is generally the final one, although other factors are also involved. One interesting set of phonetic contrasts is due to lexicalization: [ʃi:χ 'ko:α ʔαpaʔ] 'thing that is put up high' (separate words), [ʃiχko:αʔαpaʔ] 'flag', and [ʃiχko:αʔαpaʔ] 'kite'. Some adverbial clauses are pronounced with very much reduced stress. The second sentence of the North Wind text, among many others, contains some examples of this.

### Conventions

All of the consonants have long variants when they follow a (long or short) stressed vowel or two-vowel sequence, with rare exceptions. In a word like /χo'komka/ 'It is noisy!', the consonant /m/ has this characteristic, although it is more noticeable when the target consonant precedes a vowel, such as in /ʔakat/ [ʔak:at] 'shark'. The lengthening is more prominent following a short vowel than following a long vowel. The consonant that lengthens cannot belong to a suffix; except for some irregular stress-retracting verbs in which a prefix consonant lengthens, it belongs to the root. This condition on lengthening produces a superficial contrast between short and long consonants. For example, in /ko:tax/, plural of /ko:/ 'guitarfish', the /t/ does not lengthen, while in /ko:tax/ 'ant', the /t/ lengthens by the general rule. The degree of lengthening depends on the degree of stress; when the accent is reduced due to the position of the word in the sentence, or due to lack of intensity in the discourse, the lengthening is less. When the stress is strong, the lengthening is very notable. Under similar conditions, the vowel that follows the lengthened consonant is also lengthened considerably. As a result, a word such as /tε:po:l/ 'black-tailed jackrabbit' is pronounced [tε:p:o:l], and the lengthened vowel may be longer than the long vowel of a stressed syllable. Since this lengthening also does not apply to suffix and epenthetic vowels, a superficial contrast between short and lengthened

vowels is possible in unstressed syllables; compare /kos/ ‘species of plant’ and /kosi/ ‘thorn’ when followed by the declarative auxiliary /(i)ʔa/ (the parenthesized vowel occurs when a consonant precedes the auxiliary): [kos: iʔa] and [kos:i ʔa], respectively.

As pointed out by Moser & Moser (1965: 65, note 17), a long vowel is not as long when it precedes a CV(C) syllable (although they state it in different terms), as in /tə:po/ ‘black-tailed jackrabbit’. The first vowel is contrastively long, but the length is typically much less obvious than in other contexts.

The bilabial nasal, unlike the dental nasal, assimilates to the point of articulation of the consonant that follows it when it occurs in an unstressed syllable, as in /komˈka:k/ [koŋˈka:k] ‘Seri people’. For some speakers, including the author who translated and recorded the text below, this assimilation does not apply across certain word boundaries; for other speakers, it does. Moreover, the bilabial nasal (and not the dental) becomes velar, optionally or according to the preference of the speaker, when it occurs in an unstressed syllable utterance-finally: /ko:tpam/ [ko:tpaŋ] ‘herring’. When a bilabial nasal occurs after a tautosyllabic velar stop, the bilabial nasal becomes a nasalized labial-velar approximant. The nasalization of this approximant spreads to the vowels of that syllable: /kma:m/ [kṵā:m] ‘woman’.

When a labialized consonant follows an unrounded vowel, it is common for a very short round transitional vowel to appear before the labialized consonant: /itaḵʷ/ [iˈtaoḵʷ] ‘Did s/he kill him/her/it?’, /kikʷ/ [kiūḵʷ] ‘the one who killed him/her/it’, /taʔexʷk/ [taʔeõxʷkʷ] ‘Tiburón Island’. In addition, labialized consonants cause an immediately-following back consonant to be rounded, as shown in the preceding example; an epenthetic vowel may reveal their underlying identity: /taʔexʷaka/ [taʔeõxʷ:aka] ‘Tiburón Island, my eye!’.

Consonant clusters are common. Many complicated consonant clusters occur both word-initially and word-finally, as documented in Moser & Moser (1965) and Marlett (1988). Sequences of identical consonants occur only at morpheme boundaries; they are realized as lengthened consonants. Sequences of identical stops are therefore pronounced as stops in which the occlusion is maintained longer.

### Transcription of the recorded passage

The transcription below indicates the phonetic detail described in the ‘Conventions’ section above except for the lengthening of vowels and consonants. Some unstressed words are written joined to the words with which they are pronounced. Certain determiners, in particular, tend to lean phonetically on the following word rather than with the preceding phrase to which they belong syntactically. Words which may bear primary stress in some normal context are shown here with at least secondary stress. Doubly parenthesized consonants may not be clearly audible.

||ʔa:pa\_χaʔa 'fa:ʔ\_χaʔa to((k))\_kʷtoi: pti\_ˈme:to || 'ko:kx kōi\_ˈkipak 'kʷ:a:iχax  
fo\_ʔa:pi:x\_ta i'pakta kiʔ\_ˈspa: ta\_ma || ,oχ\_ˈtpakta\_ma 'ta:χ\_ano\_kʷiti:taai\_ma  
ʃi:χ\_ˈki:sax\_ʔant\_ˈkʷ:ε:ktim fo\_to((k))\_konˈtita ʃi:χ\_ˈiːsox\_ʔant kʷiŋ'ʃam ||  
,oχ\_ˈtpakta\_ma kṵa:χ\_ˈi:ʔaχ pte\_ˈmi:stoχ\_ʃa:ʔ\_χaʔa 'ʔa:pa\_χaʔ || ʃi:χ\_ˈki:sax  
ʔant\_ˈkʷ:ε:ktim 'tintika ʃi:χ\_ˈiːsox\_ʔant\_i'ʃam kiʔ\_ko:kʷa:ʃit fo\_ʔa:pi:x\_ta\_χ\_ˈti:χ  
kipa((k))\_ˈkʷ:iχax\_ak 'kʷspa:ta\_ma || ,oχ\_ˈtpakta\_ma 'ʔa:pa\_kap\_ˈi:χax kʔ\_ˈipak  
kʷiˈmai || mos\_ˈano\_ipa((k))\_kʷiˈmai\_χo\_ʃi:χ\_ˈki:sax\_ʔant\_ˈkʷ:ε:ktim 'tintika ʃi:χ  
\_ˈiːsox\_ʔant\_i'ʃam\_kiʔ\_ˈkʷtε:χetim\_ma kʷitkonˈkaʃit\_iʔo || ,oχ\_i'pakta\_iti\_ʔa:pa  
\_kap\_ˈiːsox\_an\_ima'χonx || ,oχ\_ˈtpakta\_ma 'fa:ʔ\_kix\_ˈti:χ\_ʔapi\_iti\_ˈkʷ:iχax\_ak  
'tko::\_ma\_iti\_ˈkʷi:χax || 'oχ\_ˈtpakta\_ma 'fa:ʔ\_kix\_ˈkṵāx\_iʔa\_jaχ\_ikṵi'tai\_ˈktam  
\_ˈtintika ʃi:χ\_ˈiːsox\_ʔant\_i'ʃam\_kiʔ kʷi'ʔa:ʃ\_ak\_iti kʷi'mi:poχ || 'oχ\_ˈtpakta\_ma  
'kṵa:χ\_ʔa:pa\_kap 'fa:ʔ\_kix\_ˈipak\_ak kʷi'ʔinoʃ\_ak kʷi'mija ||

### Orthographic version

Haapa xaha zaah xaha toc cōtooi, pti meeeto. Coocj coi quipac cōcaaixaj zo haa piij ta, ipacta quih spa ta ma. Ox tpacta ma, taax ano cōititaa ma, ziix quiisax hant cōqueectim zo toc contita, ziix z isoj hant cōinzam. Ox tpacta ma, cmaax iihax pte miistox, zaah xaha haapa xah. Ziix quiisax hant cōqueectim tintica ziix isoj hant izam quih coccazit zo haa piij ta x, tiix quipac cōiixaj hac cōspa ta ma. Ox tpacta ma, haapa cap iixaj quih ipac cōimaai. Mos ano ipac cōimaai xo, ziix quiisax hant cōqueectim tintica ziix isoj hant izam quih cōteexetim ma, cōitcomcazit iho. Ox ipacta iti, haapa cap isoj an imaxonj. Ox tpacta ma, zaah quij, tiix hapi iti cōiixaj hac tcooo ma, iti cōmiixaj. Ox tpacta ma, zaah quij cmatj iha yax, itemitai, ctam tintica ziix isoj hant izam quih cōihaafzx hac iti cōimiipox. Ox tpacta ma, cmaax haapa cap zaah quij ipac hac cōihinol hac cōimiya.

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